CANVAS®
An investment service of O'Shaughnessy Asset Management, LLC

Using Market Volatility to Reduce Taxes: A Case Study in Tax Loss Harvesting

April 2021

In a world where passive investing is in vogue and alpha is hard to come by, proper tax management can be a valuable boost to portfolio "return." Most financial advisors are doing some form of tax loss harvesting (TLH) today, but TLH can be executed in a wide variety of ways and the most sophisticated solutions typically yield more tax alpha. Below, we dive into the value and nuance of tax loss harvesting with a specific focus on:

1. 2020 was a boon for tax loss harvesting.
2. Harvesting is a year-round endeavor: NOT only for December!
3. Owning individual securities creates more opportunity.
4. Sophisticated TLH is difficult and should be done using a systematic process and technology.

2020 was a boon for tax loss harvesting

2020 was an ideal year for tax-managed strategies and investors that used them likely saw huge tax savings. This is because **volatility and market drawdowns create increased opportunity** for loss harvesting and 2020 had both in big numbers. The US Large Cap market was up +5.4% early in the year, collapsed in March to a low of -31.1%, and then rallied to end the year up +20.8%.[1]

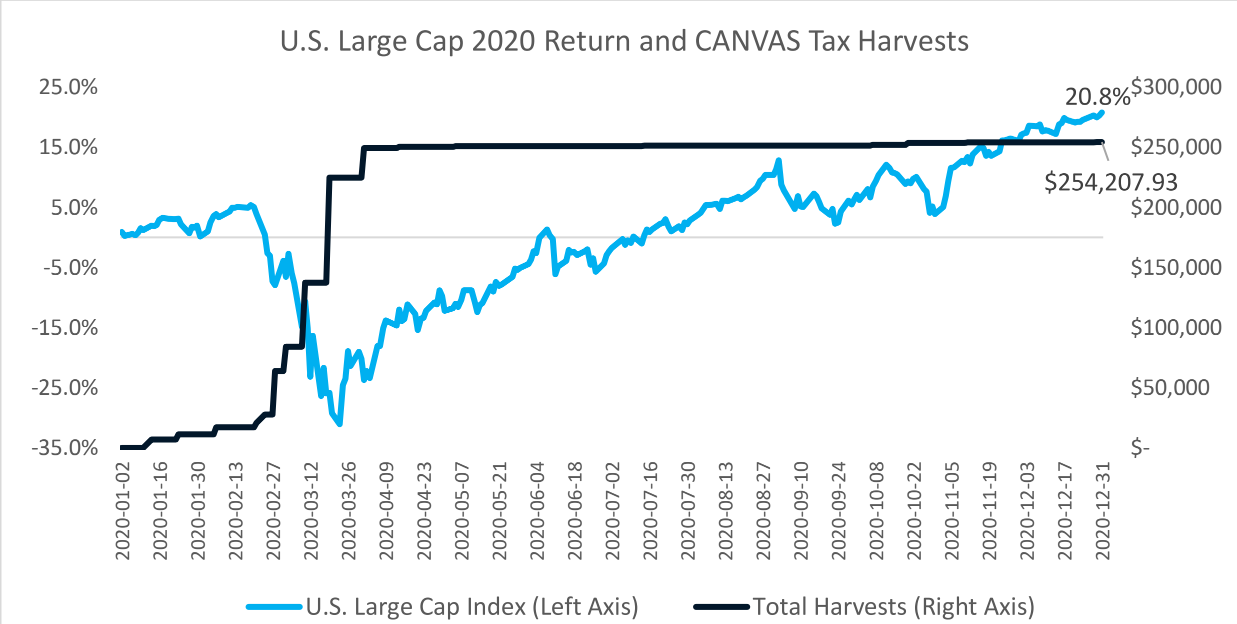
In 2020, we harvested $250,000 in losses onturn a $1,000,000 US Large Cap Direct Index Canvas® account, or 25% of the portfolio. [2] From a tax perspective, these losses could be used to reduce the investor's expected 2020 tax bill and/or carried forward as excess losses to book against future capital gains. To quantify this, a high-tax bracket investor with equivalent short-term gains elsewhere in their portfolio would have **saved over $100,000 on their 2020 tax bill or over the lifetime of the account per $1,000,000 invested in the strategy.**[3]

The graph below shows cumulative harvests for the $1,000,000 *Direct Index* Canvas account next to the cumulative return of a passive U.S. Large Cap *index*. Over the course of the year, 22 opportunistic trades were made adding up to $254,208 in realized losses in the account.

[1] Here we are using a popular ETF IWB that tracks the U.S. Large Cap Market via the Russell 1000 Index. We could use any U.S. Large Cap ETF and results would be very similar, SPY, VOO, etc.

[2] For this example, we are using a hypothetical Canvas representative account that funded January 1st with a $1,000,000 account size. All our taxable accounts in US Large Stocks had imbedded gains or losses on January 1st, 2020 which makes comparisons to live accounts difficult.

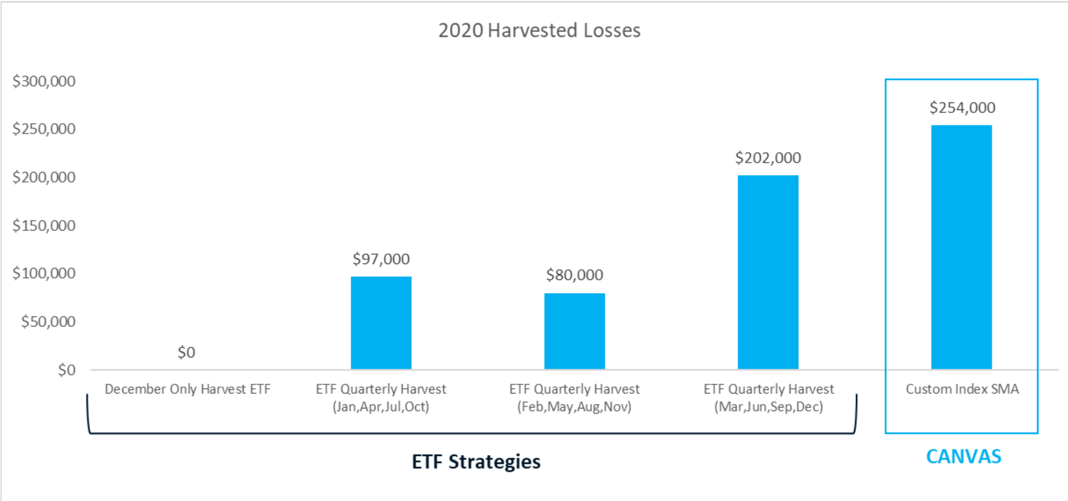
[3] Assumes 40.8% tax rate on short-term capital gains, 23.8% on long-term capital gains, and dividends taxed at a 20% rate. State and city-level considerations are not applied to the analysis.



As evident, tax loss harvesting can save investors significant money by generating losses to offset gains that subsequently reduce their tax bill. Though nobody enters the market hoping for losers, there will always be down positions and when managed appropriately, losers can be turned into a tax asset. In this case, the bulk of harvesting occurred as we approached the year's low in March, but after the market bounce-back, there were still smaller opportunities to generate losses. All in all, 2020 was a good year for tax-managed strategies, but investors were primarily rewarded if they were invested in strategies that were actively harvesting during the volatile drawdown.

Harvesting is a year-round endeavor: NOT only for December!

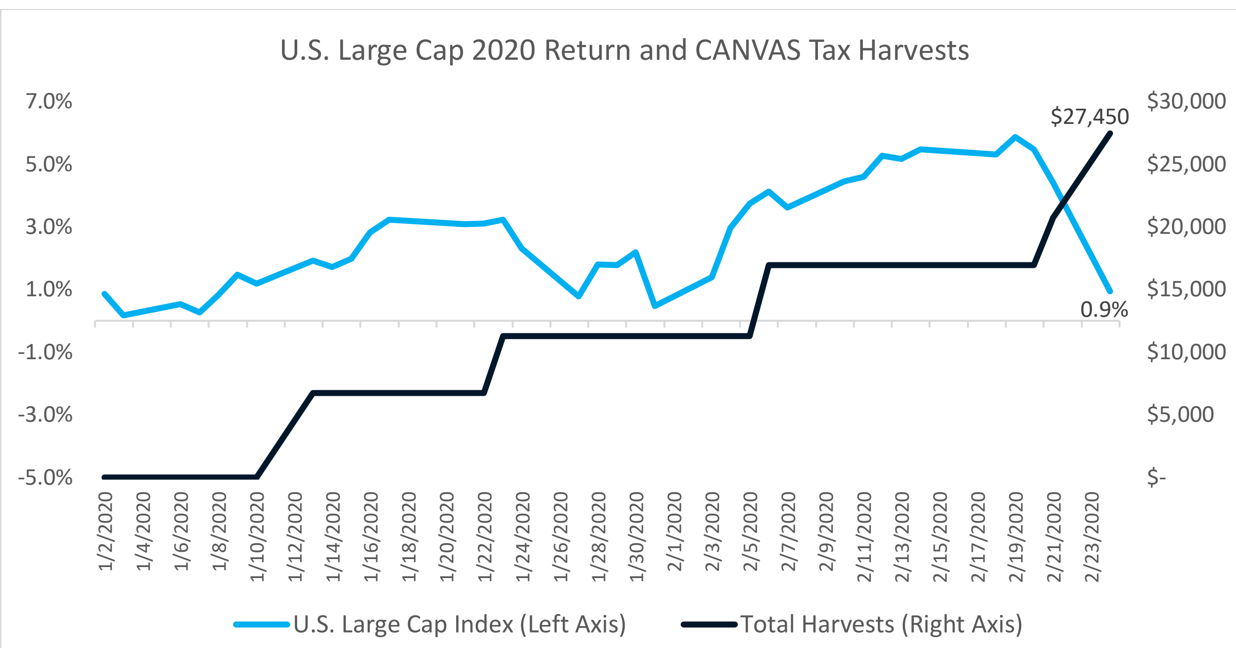
Looking at the above, an investor using comingled products like mutual funds or ETFs that only harvest in December would have booked $0 as opposed to the ~$250,000 in losses. In 2020 there were no loss-harvesting opportunities for ETF investors that were not actively harvesting in the first 7 months as their ETFs would have been in positive territory for the final 5 months. Realizing losses quarterly would have been beneficial but still less favorable than the Direct Index results. **Specifically, a strategy that reviewed for TLH opportunities quarterly leveraging only ETFs would have yielded a wide range of outcomes – from as low as $80,000 to as high as $202,000.**



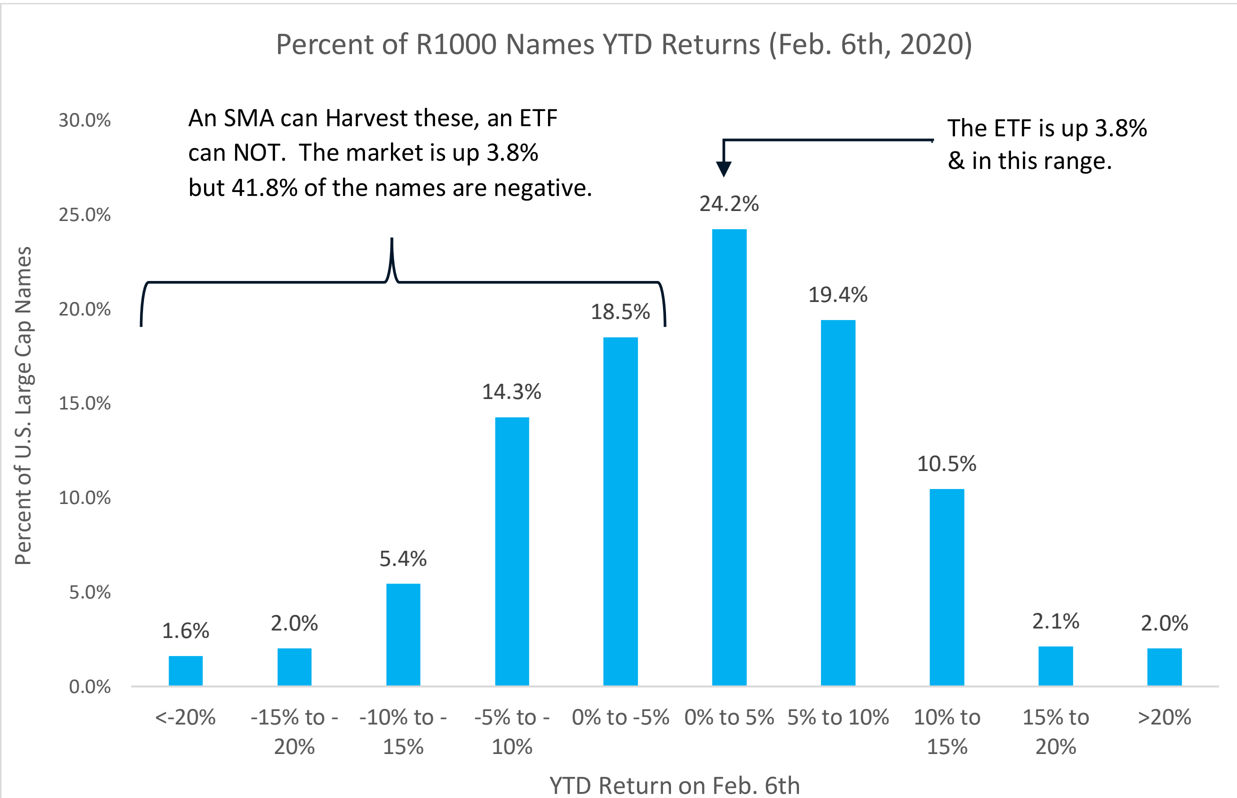
In summary, not all tax loss harvesting techniques are created equal. We recommend advisors choose a strategy that regularly monitors for harvesting opportunities as the market moves, rather than only at year-end or some other preset interval.

Owning individual securities creates more opportunity

Below highlights the first two months of 2020. The market did not turn negative until February 25th. In the two-month period without a negative close, the Canvas Direct Index harvested $27,450 in losses. This was achieved by owning individual securities emulating the desired index, rather than fund shares of the index-tracking product. An ETF or mutual fund can only tax loss harvest if the whole fund is down, limiting its tax efficiency.



Diving deeper, the graph below plots individual companies in the Russell 1000 index broken out into YTD return buckets as of February 6th. On this date, IWB (an ETF tracking the Russell 1000) was up +3.8% YTD, so a taxable ETF investor who incepted on 1/1/20 had no opportunity to harvest losses. **But if we examine the underlying constituents of the index, 41.8% of the holdings were negative, with 9.0% of those names down -10% or more.** In essence, if you owned the individual names in the R1000 index rather than an ETF, the entire left side of the chart was available for loss harvesting. On this day alone we harvested $6,000 in the representative Direct Index Canvas account.



As alluded to earlier, even when a market-tracking product is up, 40% or more of the individual names may be down. Historically, the U.S. Large Cap market has been positive in 71% of calendar years but in each of those years, an average of 36% of stocks have delivered a negative return. Therefore, investors that choose to own the individual names through a separately managed account will likely be able to realize available losses even when the market is up – boosting after-tax return.

Sophisticated TLH is difficult and should be done using a systematic process and technology

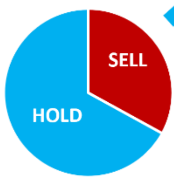
Individual holdings and opportunistic harvesting offer many benefits to investors but tax loss harvesting at this level is exponentially more difficult. Loss harvesting with ETFs involves swapping one ETF for another that tracks a very similar yet different index (like the S&P500 (SPY) for the Russell 1000 (IWB)) to maintain the efficacy of underlying fundamentals while generating tax offsets. Sophisticated TLH at the individual stock level is not as simple as trading one stock for another: it is not trading Coke for Pepsi. This example offers a comprehendible explanation of what TLH is but is oversimplified since TLH in SMAs is not optimized via a 1-for-1 swap and must be able to account for many variables at once.

Take for example, the Canvas process which systematically sells a basket of securities at a loss and replaces it with a new basket of securities while controlling for 50+ risk characteristics, sectors, market caps, regions, etc.; minimizing Tracking Error to the target model/index; minimizing market impact and trading costs; avoiding wash sales (sometimes across multiple accounts); and maintaining custom factor and ESG preferences where applicable. In essence, this systematic process works to create the "same" portfolio through different names and weights while simultaneously building a tax asset.

Below is an example of a specific trade for the Direct Index we've been discussing. The March 20th trade sold 150 securities. The basket was replaced with 139 names. The result generated over $87,000 in harvested losses, reduced Tracking Error to the model portfolio, created no wash sales, maintained the underlying factor characteristics (return profile), and stayed within our defined risk controls.

Tax Loss Harvest Trade

Starting Portfolio	
AUM	$765,000
Tracking Error	0.95%
Holdings	216



Sold Positions	
$ Value:	$410,995
Name Count	150
Lot Count	176

Factors*	
Value	51
Momentum	78
Yield	61
Quality	60

* Higher is Better (0 to 100)

Bought Positions	
$ Value:	$410,995
Name Count	139
Lot Count	139

Factors*	
Value	49
Momentum	75
Yield	64
Quality	60

Post Harvest Portfolio	
AUM	$765,000
Tracking Error	0.91%
Holdings	214
Wash Sales	0
Losses Harvested	$87,139

As described above, **this complex process must be done opportunistically and potentially across thousands of accounts at once.** It is impossible to predict with any precision when optimal harvesting opportunities will present themselves. Therefore, a software-based process that continually monitors for opportunities is better positioned to maximize tax alpha.

In the past, TLH could be a full-time job for one team member or more likely, not monitored at a frequency to maximize its full potential. When leveraging software like Canvas, advisors can save time and outsource this complex and time-intensive process so they can focus on building and deepening client relationships, knowing their client accounts are being optimally tax-managed according to client desires.

Conclusion

Tax loss harvesting can significantly reduce investor tax bills. But some market conditions present more opportunity than others (like we saw in March of 2020) and some approaches can better capitalize than others. When choosing a tax management strategy, make sure that it continually monitors for losses, utilizes individual holdings (not comingled funds like an ETF), and leverages systematic software with a paramount focus on speed, precision, and value. We've built Canvas to do just this so we can help financial advisors save on tax dollars and generate strong after-tax return for their clients.

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- The hypothetical performance does not reflect the reinvestment of dividends and distributions therefrom, interest, capital gains and withholding taxes.
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For the full composite performance summary of this strategy. please follow this link: http://www.osam.com

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